

U. S. DEPARTMENT OF AGRICULTURE

REPORT FOR JULY, 1908.

LOUISIANA SECTION

OF THE

CLIMATOLOGICAL SERVICE

OF THE

WEATHER BUREAU

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CHIEF U. S. WEATHER BUREAU

BY

I. M. CLINE,

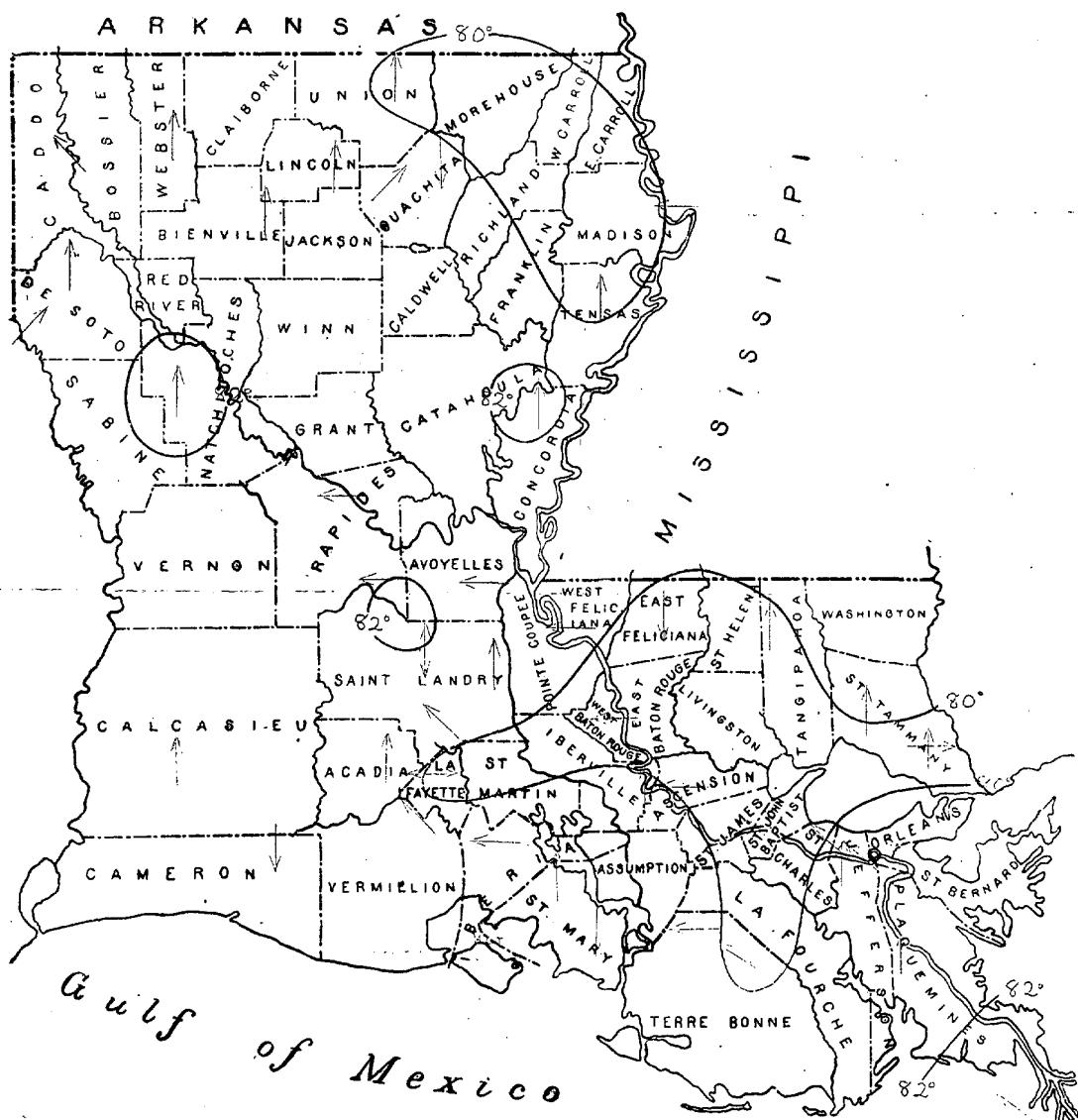
DISTRICT FORECASTER AND SECTION DIRECTOR.



NEW ORLEANS, LA.
WEATHER BUREAU OFFICE

AUGUST 28, 1908.

MEAN ISOTHERMS AND PREVAILING WINDS FOR JULY, 1908.
[Arrows fly with the wind.]



U. S. DEPARTMENT OF AGRICULTURE,

CLIMATOLOGICAL SERVICE
OF THE
WEATHER BUREAU.

CENTRAL OFFICE: WASHINGTON, D. C.

LOUISIANA SECTION,

I. M. CLINE, Section Director.

VOL. XIII.

NEW ORLEANS, LA., JULY, 1908.

No. 7.

GENERAL SUMMARY.

The weather for the month of July, 1908, was somewhat cooler than usual, but the average rainfall for the State was abnormally heavy. During the past twenty-one years, a lower mean temperature for the month of July has occurred but six times, the lowest record being 78.7° in 1894. The highest mean temperature for July was 83.2° in 1896. The average precipitation, 10.61 inches, was the greatest of record for July for the past twenty-one years, the next highest record for July being 9.50 inches in 1892. During this period the average precipitation for any one month has exceeded that of the present month only twice, the greater records being 15.19 inches in May, 1907, and 10.84 inches in August, 1888, but the record of 10.31 inches in September, 1898, nearly equals that of the present month. The monthly rainfall at Franklin, St. Mary Parish, was 29.28 inches. This phenomenal rainfall is second in amount, in Louisiana records, only to that at Opelousas in May, 1907, which was 29.70 inches. The next highest record for any one month was 25.67 inches at Grand Coteau in May, 1907, followed by records of 23.73 inches at Baton Rouge in May, 1907, 23.44 inches at Maurepas in August, 1888, and 23.17 inches at Rayne in May, 1907.

There was little variation in mean temperature throughout the State. The highest mean temperature occurred in the extreme southeastern portion and at a few stations in the central parishes, where it was 82° or slightly above; and the lowest occurred in the region north and west of Lake Pontchartrain and in the extreme northeastern parishes, where it was slightly below 80° . The mean temperature was below the normal, except at a few stations in south-central parishes. Normal temperatures prevailed during the first decade of the month. The second decade was generally warm, with temperature considerably above the normal, altho at many stations the lowest temperature of the month occurred on the 12th. The highest temperatures occurred at most stations on the 15th, 16th and 17th, when nearly all stations reported maximum temperatures of 95° to 100° . Cooler weather prevailed during the 3d decade, and after the 25th the temperature was considerably below the normal. At the close of the month the temperature was rising slowly.

The distribution of rainfall over the State was very uneven. Over the northern portion the rainfall ranged from less than three to more than ten inches, while over the southern portion the range was from nine to more than twenty-nine inches. The lightest rainfall occurred in the extreme northwestern and northeastern parishes, where there was less than four inches, and the monthly amounts were generally slightly less than the normal. The heaviest rainfall occurred in the central coast region, where there was more than twenty inches. Rain fell in some part of the State every day. While most of the rain fell in moderate local showers, there were a number of unusually heavy daily rainfalls, and there were only three days during the month on which rainfalls exceeding one inch were not recorded in some part of the State. Rainfalls amounting to two inches or more occurred on fourteen dates. The heaviest and most widespread rains occurred during the last seven days. During this period there were moderate rains in northern parishes, and heavy to excessive rains thruout the central and southern portions of the State. The heaviest rains occurred in the south-central and coast parishes, where daily falls amounting to more than six inches were reported at a number of stations. The heaviest fall in twenty-four hours was 9.60 inches, which occurred at Franklin on the 29th and 30th. These heavy downpours caused severe floods in the coast parishes.

ATMOSPHERIC PRESSURE.

The mean atmospheric pressure for the month, reduced to sea level and determined from observations taken daily at 7 a. m. and 7 p. m., 90th Meridian time, at three regular Weather Bureau stations, was 30.03 inches. The highest pressure, 30.18 inches, was recorded at Shreveport on the 15th, and the lowest, 29.79 inches, occurred at New Orleans on the 30th, making the absolute range for the State 0.39 inch.

TEMPERATURE.

The mean temperature for July, 1908, determined from the records of all (42) stations from which reports have been received, was 80.8° , which is 0.8° below the normal for the State for the month. The highest monthly mean temperature was 82.2° at Burrwood and Ferriday, and the lowest, 78.6° at Clinton and Reserve. The highest temperature recorded was 102° at Melville on the 14th and at Monroe on the 16th, and the lowest was 59° at Minden and Robeline on the 1st. The greatest monthly range at any station was 42° at Minden, and the least was 22° at Cameron. The greatest daily range at any station was 36° at Minden.

PRECIPITATION.

The average precipitation for the State, determined from the records of all (47) stations from which reports have been received, was 10.61 inches, which is 5.19 inches above the normal for the month. The greatest amount recorded at any station was 29.28 inches at Franklin, and the least, 2.16

inches at Grand Cane. Excessive rainfall (2.50 inches or more in 24 hours) was reported as follows: Abbeville, 6.50 inches on the 29th, and 3.40 on the 30th; Burnside, 2.97 on the 30th; Cameron, 3.15 on the 28th; Donaldsonville, 2.85 on the 29th and 30th; Franklin, 4.50 on the 28th and 29th, 9.60 on the 29th and 30th, and 3.52 on the 30th and 31st; Grand Coteau, 3.05 on the 30th; Houma, 2.50 on the 3d and 4th, and 5.41 on the 29th and 30th; Jennings, 2.70 on the 28th and 29th; Lafayette, 4.22 on the 30th and 31st; Lakeside, 3.50 on the 27th and 28th; Lawrence, 4.40 on the 29th and 30th; Melville, 2.65 on the 30th; Morgan City, 3.25 on the 29th and 30th; New Iberia, 5.05 on the 29th, and 6.85 on the 30th; New Orleans, 3.02 on the 29th and 30th; New Orleans No. 2, 2.74 on the 30th; Opelousas, 3.45 on the 7th, 3.10 on the 11th, and 4.12 on the 29th and 30th; Reserve, 3.00 on the 29th and 30th; Ruston, 4.00 on the 20th and 21st; Schriever, 6.75 on the 29th and 30th; St. Francisville, 3.50 on the 26th and 27th.

The average number of days on which .01 inch or more of rain fell was 15.

WIND.

The prevailing wind direction was south. The total movement at New Orleans was 5,085 miles; at Shreveport, 4,087 miles, and at Vicksburg, Miss., 4,133 miles. At New Orleans the maximum velocity was 38 miles per hour from the southeast on the 23d; average velocity, 6.8 miles per hour. At Shreveport, the maximum was 29 miles from the southeast on the 19th; average velocity, 5.4 miles. At Vicksburg, Miss., the maximum was 28 miles from the southwest on the 19th; average velocity, 5.6 miles.

SUNSHINE AND CLOUDINESS.

At New Orleans the sunshine for the month, as indicated by the self-registering instrument, was 50 per cent of the possible amount.

The average number of clear days was 11; partly cloudy days, 11; cloudy days, 9.

MISCELLANEOUS PHENOMENA.

HALO.—Lunar.—Rayne, 5th, 14th.

HAIL.—Franklin, 11th; New Orleans, 14th.

THUNDERSTORMS were reported as follows: On the 1st, 2; 2d, 4; 3d, 3; 4th, 3; 5th, 6; 6th, 3; 7th, 9; 8th, 2; 9th, 2; 10th, 5; 11th, 5; 12th, 2; 14th, 3; 15th, 6; 16th, 4; 17th, 2; 18th, 1; 19th, 8; 20th, 3; 21st, 4; 23d, 3; 24th, 5; 25th, 4; 26th, 3; 27th, 1; 28th, 2; 29th, 2; 30th, 1.

THE RIVERS.

The lower Mississippi River was falling thruout the month. It was above the flood stage at the opening of the month, but past below the flood stage at Vicksburg, Miss., on the 4th, at Natchez, Miss., on the 8th, at Baton Rouge, La., on the 19th, at Donaldsonville, La., on the 17th, and at New Orleans, La., on the 16th. During the latter part of the month the fall was rapid. The highest stages reported dur-

ing the month were as follows: Vicksburg, Miss., 45.7 feet on the 1st; Natchez, Miss., 47.3 feet on the 1st; Baton Rouge, La., 39.0 feet on the 1st; Donaldsonville, La., 30.9 feet on the 1st; New Orleans, La., 19.5 feet on the 1st and 2d. The lowest stages occurred as follows: Vicksburg, Miss., 25.6 feet on the 31st; Natchez, Miss., 30.5 feet on the 31st; Baton Rouge, La., 26.0 feet on the 31st; Donaldsonville, La., 20.0 feet on the 31st; New Orleans, La., 13.2 feet on the 31st.

The Atchafalaya River was very high, but was falling during the entire month. The water past below the flood stage about the close of the second decade. The highest stage at Simmesport was 44.7 feet on the 1st and 2d; at Melville, 39.3 feet on the 1st and 2d; and the lowest stages were 31.9 feet at Simmesport on the 31st, and 31.5 feet at Melville on the 31st.

The Red River was falling at Shreveport during most of the month. At Alexandria it was rising at the opening of the month, and it continued to rise at that place until the 6th, when the unprecedented stage of 41.8 feet, 5.8 feet above the flood stage, was reached. During the remainder of the month the water was falling, except on the 28th, when there was a slight rise. At Shreveport the daily stages ranged from 9.4 feet on the 28th to 29.4 feet on the 1st. The stages at Alexandria ranged from 22.6 feet on the 31st to 41.8 feet on the 6th.

The Ouachita River was at moderate stages, but was falling thruout the month. At Monroe, La., the highest stage was 31.2 feet on the 1st, and the lowest was 17.5 feet on the 31st.

ERRATA.

Report for June, 1908: Collinston, precipitation on 1st, page 48, should be .87; total precipitation, pages 45 and 48, should be 4.94. Cheneyville, greatest daily temperature range, page 45, should be 31. Liberty Hill, greatest daily temperature range, page 45, should be 34. Monroe, precipitation on 1st, page 48, should be .36; total precipitation, pages 45 and 48, should be 3.44; departure from normal precipitation, page 45, should be —0.68.

LATE REPORTS.

Morgan City, June, 1908: Total precipitation, 4.08 inches; number of rainy days, 5; clear days, 12; partly cloudy days, 6; cloudy days, 12; prevailing wind direction, southeast.

REMARKS BY OBSERVERS.

ABBEVILLE.—July was a hot, showery month. The storm of the 28th–31st was a regular deluge. The fields were flooded and much damage was done.—C. J. Edwards.

NEWELLTON.—The weather was showery all the latter part of the month. There was no heavy rain, but it was cloudy nearly all the time.—J. D. Fultz.

SCHRIEVER.—A heavy rain occurred on the 29th, which caused considerable damage.—Chas. V. Moore.

Climatological Data for Louisiana, July, 1908

Letter of alphabet denotes number days missing. All records are used in determining State means, but the mean departures from normal temperature and precipitation are based only on records from stations that have ten or more years of observations. * Received too late to be used in State means or summary.

*And other dates

[§]Temperature record not used in State means or summary.

s. + Received too late to be used in State means or summary.
+ Precipitation record not used in State means or summary.

1 Maximum and r

m thermometers not supplied by the Weather Bureau. 2 M

[†]Precipitation record not used in State means or summary.
[—]Thermometer not supplied by the Weather Bureau.

The rain gages operated by the Drainage Commission of New Orleans are located at the following points: a—Carrollton avenue, intersection of Mississippi Valley Railroad, 3 feet above the ground. b—Sugar Experiment Station, Audubon Park, 4 feet above ground. c—Jefferson Market, Berlin and Magazine streets, 15 feet above ground. d—City Hall, 80 feet above ground. e—London Draining Station, London avenue and Gentilly road, 10 feet above ground f—Pacific avenue, near Southern Pacific railroad shops, 22 feet above ground. These records are not used in computing State means.

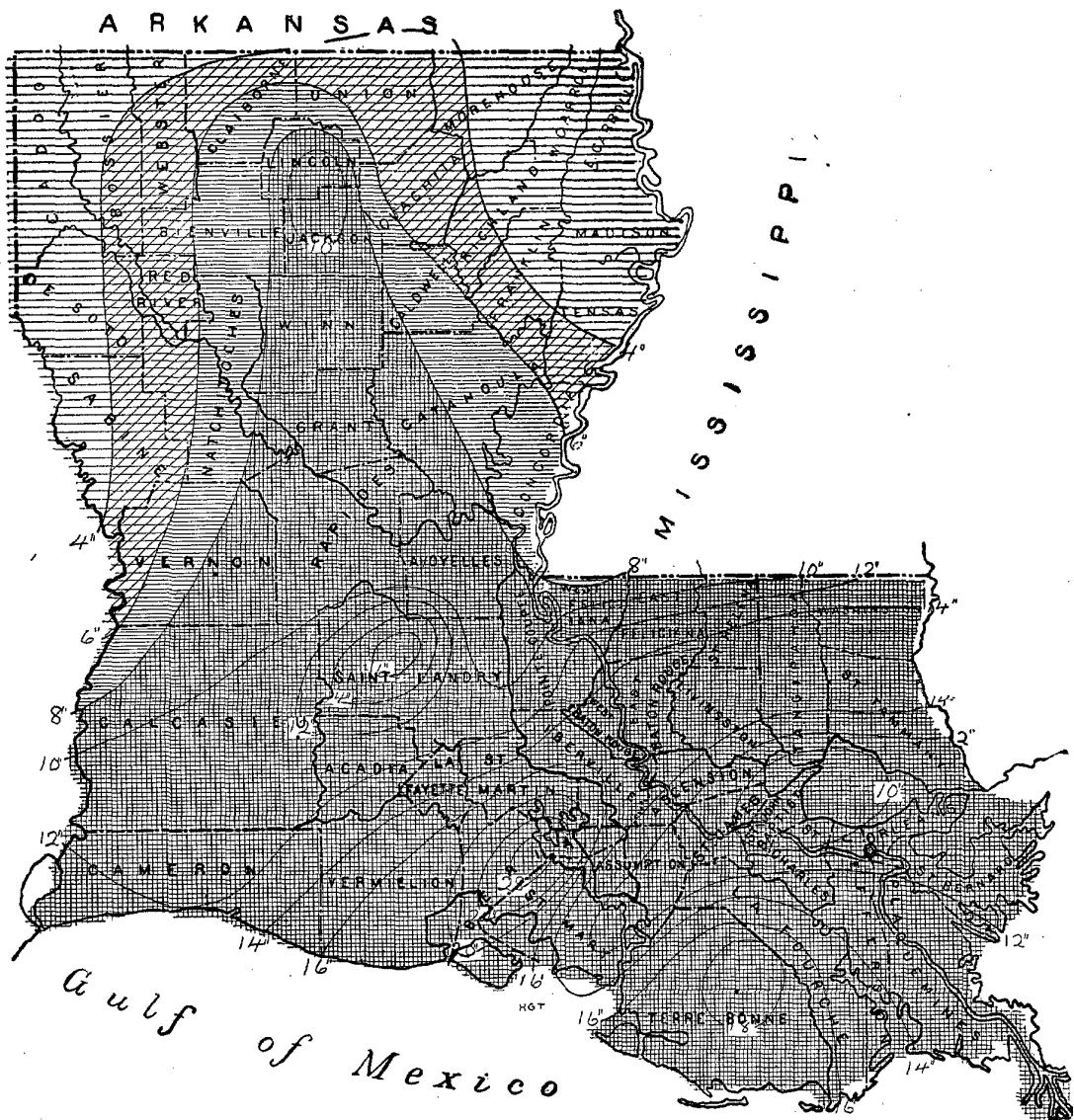
CLIMATOLOGICAL REPORT: LOUISIANA SECTION.

80(1) MAY

Maximum and Minimum Temperatures for Louisiana, July, 1908.

* At these stations thermometers are read in the morning; the maximum temperature then observed appears in the maximum column for the preceding day, on which it nearly always occurs. Bold face figures indicate temperatures of 100 or higher, as follows: 00=100; 01=101, &c.

TOTAL PRECIPITATION FOR JULY, 1908.



SCALE OF SHADES IN INCHES:

Less than 2	2 to 4	4 to 6	6 to 8	More than 8

Daily Precipitation, in Inches and Hundredths, for the Month of July, 1908.

STATIONS.	Day of month.																																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total					
Abbeville .....	.40	.07	.25	.70	.....	.35	.12	.10	T.	.02	.02	.13	.....	.....	.63	.....	.....	T.	.05	.12	.....	.52	.21	.18	.....	.78	6.50	3.40	.15	14.70			
Alexandria* .....	.33	.12	.42	.17	.....	.20	.....	T.	.....	.80	.97	.....	.45	.....	.17	(1.10	.58	.....	.05	.20	T.	T.	.60	2.10	T.	.78	1.35	.54	2.45	.55	14.75		
Amite* .....	.95	.65	.31	.15	T.	.....	T.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	T.	.....	.....	.....	.01	.31	2.11	.25	.71	1.73	1.11	1.23	14.23			
Baton Rouge* .....	.05	.45	.37	.53	.02	.78	1.43	.07	1.68	.09	.....	.....	.....	.....	.....	.....	.....	T.	.26	.01	.04	.22	.87	.01	.31	2.11	.25	.71	1.73	1.11	1.23	13.11	
Burnside .....	.75	.32	.20	.25	.10	.55	.10	.06	.35	.20	2.10	.10	.01	1.08	.....	.....	.....	.....	.02	.....	.....	.62	.35	.98	.....	1.85	2.97	.15	1.05	13.11			
Burrwood .....	.....	1.20	.20	.10	.40	.....	.10	.90	.20	.....	.....	.....	.....	.....	.....	.....	.....	T.	.....	.10	.....	.30	.60	1.40	1.70	1.20	.30	1.65	2.30	.35	12.90		
Calhoun .....	.....	.14	T.	.....	.....	.....	.....	.10	.....	.....	.....	.....	.....	.....	.....	.....	.....	T.	.....	.10	.90	.....	.58	.47	.24	.04	.53	.27	.30	4.19	4.19		
Cameron	T.	1.20	.52	.55	T.	T.	.52	.89	.06	T.	1.69	.64	.....	T.	.....	.....	.....	T.	.....	.02	.65	.19	.....	.11	T.	T.	.16	.14	3.15	2.5	T.	1.22	11.95
Cheneyville*	T.	T.	2.20	.25	.....	.....	1.50	1.40	.....	T.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.50	.30	.20	1.02	T.	1.50	9.17	9.17			
Clinton* .....	.68	.....	2.06	1.69	.....	1.57	.56	T.	.....	T.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.05	.50	.....	.....	.....	.....	.....	.....	1.07	11.07	
Collinston* .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Covington*7524	.15	T.	T.	T.	1.32	.19	.65	.82	.0525	.22	.0422	T.	.43	T.	.10	1.54	.03	.80	1.35	2.23	2.02	.57	14.97
Dodson .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Donaldsonville*93	.40	.27	1.70	.47	T.37	.22	.10	1.60	.40	.25	T.15	.10	1.48	.2012	.12	.10	1.63	.75	1.15	2.85	.65	15.41			
Farmerville* .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ferriday .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Franklin* .....	.....	1.81	.34	1.01	.85	T.	.....	.40	.47	1.12	T.	.15	.....	2.06	1.83	.10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6.90
Grand Cane* .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	29.28
Grand Coteau .....	.93	.03	.12	.....	.73	.12	.55	.....	.12	.....	.55	.05	.....	.....	1.35	.....	.....	.....	.....	.....	.....	.....	.82	.42	T.	T.	.43	.02	.65	.95	3.05	.60	11.49
Houma* .....	.....	.....	.84	2.50	.48	.05	.55	T.	.....	.54	1.38	T.	.....	.....	.53	.....	.....	.....	.....	.....	.....	.....	.28	.....	.51	.24	.30	2.14	I.05	2.19	5.41	.54	19.59
Jennings* .....	.19	.....	.04	.36	.....	.55	.05	I.16	.15	.....	.....	1.71	.25	.....	.....	.16	.....	.....	.....	.20	.39	.....	.02	.....	.30	.....	.19	1.50	2.70	.12	.53	10.57	
Lafayette* .....	.53	.35	.04	2.04	.23	.....	.17	T.	.04	.02	.....	.03	.55	T.	.61	.....	.....	.03	.10	.04	.....	.08	.04	.51	.51	.08	1.98	.90	4.22	13.17	13.17		
Lake Charles* .....	.....	.....	.40	1.20	.....	.....	1.40	.....	.....	.....	.30	.....	.....	1.90	.30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11.45	
Lakeside* .....	.47	I.47	.55	.....	.47	.27	.85	I.20	.....	.....	.59	.....	.....	31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11.99	
Lawrence* .....	.....	.....	.16	.43	.04	.....	.....	.30	.37	.....	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12.32	
Liberty Hill .....	.....	.47	.36	.....	.....	1.13	.....	.44	.20	.....	.....	.....	.....	T.	.....	.....	.....	T.	.....	.20	T.	1.57	.....	.13	.28	.34	.36	.14	.53	.40	7.90		
Logansport* .....	.....	.....	.32	.....	.....	.....	.22	.32	T.	.....	.10	T.	.....	T.	.....	.....	.....	.....	.32	.20	.....	.86	.....	.....	.70	.04	.02	.....	.....	.....	3.36	3.36	
Melville* .....	.....	.05	.10	.10	.15	.....	.....	.....	.10	T.	.....	T.	.....	.....	.....	.....	.....	.....	.....	.70	.10	.20	T.	.50	T.	.10	.20	.10	1.90	.70	2.65	9.45	9.45
Minden* .....	.....	.....	.16	.....	.....	.....	.....	.03	.10	T.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.05
Monroe* .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	T.	.....	.....	.....	T.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.00
Morgan City, * .....	.26	.....	.....	1.17	T.	.....	.50	.05	.....	1.40	.....	.....	1.86	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.66	.....	.80	.50	I.65	3.25	.25	.15	11.60	
Natchez, Miss. *	T.	.....	.17	T.	.....	T.	.17	.03	T.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.09	.63	3.30	.95	.83	.12	.08	.....	.....	5.28	
Newellton .....	.....	.....	.15	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.35	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.48	.....	.30	.15	.....	.....	.....	.....	.....	2.88
New Iberia	1.05	.95	.20	.15	.30	20	1.45	.20	.05	.10	.....	.85	.....	.35	.....	.....	.....	.....	.....	.....	.....	.....	.20	.20	.30	.05	.20	5.05	6.85	25.20	20.85		
New Orleans	1.05	.60	.33	.02	.12	.....	.01	.49	T.	.....	.35	.....	.14	.01	.92	.....	.....	T.	.....	.10	.48	.16	.....	.04	.09	.07	1.42	2.46	23	11.03			
New Orleans No. 2*09	.56	.20	.14	I.0409	.70	.0193	29	T.47	.05	.01	I.02	.24	.92	.19	.23	.71	1.16	2.74	.36	12.16		
New Orleans a* .....	.....	.....	.33	.14	.02	1.35	.....	.19	.14	.....	1.00	.....	.10	.53	.....	.15	.....	T.	.....	.87	.03	.20	.36	.21	.52	.....	.30	.02	.65	1.26	2.43	.26	11.06
New Orleans-b50	.22	.12	1.00759209	.130141	.05	.11	.80	.23	.8828	.08	1.71	2.05	.40	11.43	
New Orleans-c79	.33	.08	I.0403	.1465	1.0149	.03	.0343	.4345	.06	.52	3.36	.96	.23	11.07	
New Orleans-d .....	.....	.....	.57	.22	.04	.13	.....	.....	.....	.....	.....	.....	.42	.....	.75	.....	.....	.....	.....	.....	.....	.....	.58	.....	.33	.....	.....	.....	.....	.....	.....	.....	20.91
New Orleans e35	.34	.34	.4533	.9501	.01	.5867	.06	.05	.20	.08	.6758	.03	6.21	1.25	1.96	.21	9.74	
New Orleans f	1.12	.54	.39	.30	.17	.....	.02	.49	.....	.....	.....	.07	.....	.27	.....	.08	.23	.....	.....	.50	.05	.02	.....	.54	.18	.27	.26	.58	.27	.....	.35	11.36	
Opelousas* .....	.08	.45	T.	.....	.60	.....	.....	.....	.34	.68	.....	3.10	.....	.....	.....	.....	.....	T.	.....	.21	.....	.....	.25	.52	.....	.....	.14	T.	.48	.78	2.25	.25	16.73
Pearl River* .....	.....	.....	.....	.....	.....	.....	.44	.16	.32	.24	T.	.16	.04	.20	T.	.....	.01	T.	.....	.22	.....	.01	T.	.14	.32	.84	.....	.20	1.20	1.20	1.20	1.44	10.42
Plain Dealing .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rayne*60	.750818	T.2564	.15	2.0005	T.	.81	T.	.21	.46	.46	2.00	10.97		
Reserve* .....	.....	.20	.10	.15	.15	1.50	.....	T.	.03	T.	.....	.28	T.	.....	T.	.....	.....	.....	.....	.....	.....	.....	I.50	.55	.10	.50	3.00	.40	8.90				
Roberline* .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.08	T.	.....	.14	.37	1.07	4.79			
Ruston .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.20	.50	.40	.10	.10	.15	1.15	1.15	10.15		
Schriever* .....	.....	T.	.....	.....	.74	.70	.11	.11	.08	.12	.14	T.	.....	.16	T.	.41	T.	.50	.....	.25	T.	.....	.05	.....	.78	.20	.94	.30	.24	.75	.97	15.66	
Shreveport .....	.....	.....	.04	T.	.....	.....																													

Figures given show precipitation for 24 hours ending as follows, local time: At stations marked (*) at 7 a.m.; at stations of the New Orleans Drainage Commission, and at regular Weather Bureau stations, at midnight; at all other stations, about sunset. +Precipitation included in that recorded on the first subsequent date. "T"—Indicates a trace of rainfall. *Sugar Experiment Station, Audubon Park. ? See note at foot of climatological table.

COMPARATIVE DATA.

The following tables show the temperature and precipitation during July for the last 11 years:

STATE OF LOUISIANA.											AT SHREVEPORT, LA.												
Data	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	Data	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908
Mean temp.....	80.9	82.7	80.6	83.0	82.2	80.8	79.9	80.2	81.3	82.7	80.8	Mean temp.....	81.7	83.2	81.2	84.0	80.8	81.2	80.8	79.7	80.5	83.3	81.6
Highest temp....	103	105	100	111	102	103	100	106	102	106	102	Highest temp...	98	101	95	107	95	97	95	95	96	100	97
Lowest temp....	55	54	60	55	60	54	56	59	60	58	59	Lowest temp....	65	62	68	68	68	67	67	64	65	66	68
Average precip....	5.84	3.54	7.11	5.97	4.56	6.12	7.17	8.52	7.97	4.07	10.61	Total precip.....	1.48	0.98	5.86	4.00	8.02	3.32	2.89	13.16	4.50	1.47	3.93
AT NEW ORLEANS, LA.											AT VICKSBURG, MISS.												
Mean temp.....	81.4	82.6	81.2	82.7	83.0	81.8	80.7	81.6	82.4	83.2	81.2	Mean temp.....	79.6	81.6	79.8	82.2	81.4	80.6	78.4	78.8	79.5	81.6	80.2
Highest temp....	97	93	92	102	95	95	92	94	94	97	94	Highest temp....	94	94	92	100	96	94	92	97	92	96	95
Lowest temp....	70	69	71	70	69	69	70	66	72	70	70	Lowest temp....	64	64	69	63	67	64	67	65	67	66	68
Total precip....	4.57	5.45	6.08	10.71	4.24	7.17	8.49	3.93	7.32	4.47	11.03	Total precip.....	5.90	2.50	6.30	3.35	6.68	2.11	2.49	4.47	3.17	10.88	3.23